family. Babies lacking in merit died at their birth, just as mothers whose merit had run low suffered or died in childbirth.

A soul desiring rebirth flew into the womb of a woman at conception. By care and imitative magical practices, both parents helped the fetus grow but the mother gave the baby its body. Parturition was a joint effort of mother and child, the course and outcome of which was determined by their respective stores of merit. After delivery the child was blessed, his soul seized and tied in, and ritual means taken that he not wander from home throughout life. A post-partum rest of several days was taken beside a hot fire, the purpose of which was both physiological, i.e. to dry the uterus, and ritual, to bring about full "ripe" adulthood.

The fire, which was consecrated, strengthened a woman and made her a better nourisher, mature, more compassionate, and eligible to handle magic and the tender souls of living creatures. Thus she was fitted for her life-calling as a woman. The comparable ceremony of maturation for men, when they too were changed from "raw" to mature, compassionate, and strong males for their calling of fatherhood and leadership, was ordination into the Buddhist priesthood. Only those men and women who had undergone their respective rites of maturation were eligible to handle magic. Men's magic gave power, control and could be aggressive. Women's magic was limited to nurturing purposes, and could never be destructive. The respective areas of magical competence and right were autonomous and rigidly separated on pain of severe sanctions.

This view of the role of woman in life and the events of childbirth in the earthly and cosmic scene, had the effect of giving women in childbirth a positive, secure, and relaxed outlook, and an understanding and acceptance of suffering so that they had little fear.

How careers in midwifery, whether professional or amateur were established, and the nature of the specialty and of a practice are discussed.

The understanding of, and the attitudes toward, modern medicine are given along with findings accounting for acceptance or rejection of modern hospital care for parturients. Accepting the changes that were observed in the practices surrounding childbirth proved to be a means of expressing partial withdrawal from the old life of a farmer and a step towards the glitter of urban ways. In the desire to be seen as progressive, the fire rest had been shortened, market products substituted for the consecrated fire, and other urban ways introduced.

For persons interested in introducing changes in the

This economic picture indicates that from early childhood, women had engaged in such physical labor that by 18 years of age they had strong muscles and backs through lifting, stooping, and squatting. Since to stop work during pregnancy was construed as laziness, women worked vigorously up to the day of delivery. If a woman were delivered during one of the hectic seasons, she might shorten her post-natal rest to whatever she thought was a safe minimum.

Marriage

As people of the community often met at the temple, at ceremonies, and at work parties, there too young people met. Unmarried girls went freely and often alone on duties about the community, and also to Minburi to sell vegetables or take a load of paddy to the mill. To temple fairs and such they went in groups. Though parents hoped their children would marry within the community, a few young people "married out."

Girls were married between 17 and 27 or so, most frequently around 21 to 23. Since boys at 21 might have to serve 2 years in the army, and were urged to spend as well at least a few months in the priesthood, their marriages took place between 22 and 30, most often around 24 or so. Parents were in no hurry to marry off their grown children at the very age when their productivity was funneling wealth back into the family. However, if male help in the family were short, parents were more receptive to suitors. No girl was married against her wishes nor to a stranger.[4] Marriages might be arranged through formal conversations opened by the man's family and carried on through a go-between, but the girl had the final say. A secret agreement between the partners might even precede negotiations. About half of the marriages were elopements, sometimes arranged because negotiations were dragging, sometimes to avoid the higher costs of more formal arrangements. Marriage, though largely based on socio-economic factors (Phillips:62) was not devoid of personal esteem. Sharp (Bang Chan data at Cornell) has a note on the desirable qualities in a husband as viewed by women. "Sexual virility," last on the list, was minimized in relation to such qualities as "religiousness," "wealth," "industriousness," which headed the list.

4. A person who uses magical means to force an unwilling woman's love "will be born 500 times as a mad dog."

## Diet in Body Maintenance and Curing

261 262 753 Because food created fire, the daily diet could be a source of illness or a therapeutic means. Every food had known properties for heating or cooling, and for other effects as well. Guava fruit, alcohol, and turtle or cobra curry were heating. Eggs were cooling. Depending on the occasion, ice and iced concoctions were over-heating or over-cooling. They were always "dangerous during menstruation." Banana varied according to the variety: kluai hɔ̂m (fragrant banana) was undesirably cooling and caused either diarrhea or constipation (Hauck, 1959:27); kluai nam wa was less deleterious (salaeng) while kluai nam was good for the sick or for parturients (Boonlong).

252 262 [758] [846] Properties in food changed in cooking. Boiling made rice "ripe" (suk) and so available as nourishment (Anuman Rajadhon:77). Even the method of cooking varied the properties. For the sick and for parturients, the banana variety called kluai hak suk was good if baked, but not if cooked in syrup (Boonlong).

262 753 827 Some foods were "incompatible" with, and so aggravated, certain illnesses. Air-borne food in the form of smell was incompatible with, and compounded, a condition of wind excess. Death or blindness ensued. On the other hand, asafetida might be tied to the wrist of a new-born baby so that the smell, an established carminative, might cure the excess wind in his stomach manifested as flatulence.

262 [774] [782] Beneficial foods were encouraged. Of all these none surpassed rice, the main sustenance of the body, "the only true food" (Yong Chutima, in Hauck, 1959:27) and source of "strength" to the farmer. Rice was a safe food. It never disturbed elements. Eating rice, as compared with meat, had no overtone of taking life. One could eat one's fill without any sin. Most of all, rice nourished the human khwan, for each grain contained a part of the khwan of the divine Rice Mother. Furthermore, any food offered ritually to a spirit or to make merit acquired strengthening properties, and was afterwards given to priests, children, or to the sick.

[776] Foods with known dangers were avoided. "Kluai tāni banana, a variety full of seeds, was never eaten because it contained a female ghost (phi)." Jackfruit was avoided by lactating women as a direct source of wind-excess. Fruit in general was not dangerous but "did not give enough strength for a rice farmer. It was all right for an orchardist."

844
826

speeded up with heat to the point of blasts. The strength of the contractions of labor was in direct proportion to the speed of the winds' circulation. The great pushes of the expulsive lom beng "broke down" the sac with the amniotic fluid (nam thūn hua: water-that-supports-the-head-of-the-child), and forced out the child, water, and the placenta.

After the child was out, the mother was cold, weak, and exhausted. Her uterus was full of harmful fluids. Heat was needed more than ever not only to warm her but to give the winds "the power and push" to drive out three undesirable birth-waters: "The blood that looks like ordinary blood but is bad,"; the amniotic and abdominal body water (nām khram:refuse water); and the pale, viscous, repugnant "fish-water" (nam khāo plā). Therefore, a hot fire was built, close to which the mother lay (yu fai), turning all sides of her body towards the flame. She bathed in or drank hot or warm boiled water (nam suk: cooked, or ripe, water). She ate safe foods like rice and dried fish,[31] and kluai nam bananas, continued to take alcoholic medicines of the hottest sort, such as Snake Brand, and occasionally might be given cobra or other hot curries to eat. For a first-born, a woman stayed eleven or nine days by the fire (always an odd number), with stays shorter for each successive child, but never less than five days.

844
[372]
[262]
846

Complications sometimes developed because of inadequate control of the heat. A "headache and a hot body" indicating "stagnation of the blood and the fishy-smelling-water," was cured by a heat-producing decoction. Rashes often occurred, causing small boils that might develop into sores. To soothe these, turmeric was painted on. In the most dangerous cases the heat "drove the bad blood to the heart, to the face or belly" where it was recognized by serious swelling, with resulting madness or death. In fact, one mō felt that the

846
758
278
822
[64]

---

31. The reasons for rejecting fresh fish during pregnancy ("lest a creature of hell be born") would not hold after parturition. Yet fresh fish was rejected then too "as bad for the womb." One suspects that the less odorous dried fish was substituted so that the odor of fresh fish, like air-borne, incompatible food, would not affect adversely the "fish-smelling" post-partum discharge (nam khāo plā). In Hauck's list of foods "bad for mother during the post-partum rest," the reasons are apparent: Sour tastes did not dry out the body, but built up water; egg was too cooling; jackfruit brought in wind; glutinous rice and the sugar of sweets "wet the uterus;" fruits did not give strength and were excessively cooling (cf. Hauck,1959:15).

262
843
846

• 846 758 278 [82] heat could be better controlled by medicine alone, saying "I do not prohibit a fire, but if called because of difficulties such as a temporary paralysis, I always take the patient off the fire and prescribe a decoction, or recommend more pickled medicine (yā dong)." "Damage to the thigh ligaments," treated by a masseur, was said to result from insufficient rest by the fire. If the baby died, the mother did not curtail her fire-rest but finished it out as planned. As will be seen later, the fire-rest had far deeper meaning than just physiological restoration.

844
846

The next step was to prepare for Dūan's post-partum days of rest beside the holy fire. Before the baby arrived the fire-floor had been prepared, but not lighted. Song had chopped down a banana tree, and quartered and trimmed the trunk into four good planks. Along a wall inside their house he had laid them in a square about three feet on each side and 18 inches deep. He remembered that at Chāi's birth, the fire had to be in a corner, because of the direction of the celestial Snake. Lek picked up a large round basket and went out to get the soil, which had to come from the north side of the house. Three full baskets she was to get, no less, but there could have been five. She heaped the soil into the frame, smoothing it to a good fire floor. After she poured in the last load, she picked up three handfuls of earth and put them back in the basket. Quickly she took them back to the spot she had been digging and tossed the three handfuls one by one onto the earth, murmuring to the spirit of the land that she was returning the earth she had taken. Back in the house, in each of the four corners of the fireplace, Sāi planted a little banana leaf bowl containing rice, sticks of incense, a candle, and flowers. "Some persons add areca nut and betel pepper leaves, but I was not taught to do it that way," she commented. A fire of the sakae wood was laid, and the placenta and cord in the pot placed at the back where they could dry with the heat. To prepare Dūan's bed, Song searched the house for a smooth plank about 14-16 inches wide. Not one! So he ran over to a neighbor and borrowed a good one. He cut two banana trunk sections to set this plank up so that it was as high as, and two or so hand spans from, the fireplace. Sāi checked that firewood, woodpile, and plank were all parallel to the celestial Snake. Then the fire and the incense in the corners were lit.

844
[278]

Meanwhile Sāi had been washing the lower part of Dūan's body and legs with warm, boiled water. She painted Dūan's abdomen with turmeric, lime, and alcohol, putting a little on the hands and arms, and now gave her a fresh skirt. "To cure the womb" Sāi also gave her a "filtrate" of tamarind, salt, and water to drink, the same potion people also gave to the cherished buffalo on the rare occasions when a calf was born. Finally, she asked Dūan to lie on the floor a moment. Putting her foot on Dūan's hip she pressed hard, three times on each side, to "close the hipbone" and get the pelvis back into place again.

846 789 782 Now that the fire was going nicely and Dūan was "ready to warm her body," the all-important prayer and incantation "to control the hotness and poison" of the fire had to be pronounced lest the mother's body be "swollen or burned." Sāi took raw rice, salt, and alcoholic liquor[36] in her mouth, chewed them, and sprayed them over the fire and over Dūan's body three times, saying "Spirit of the Fire and Wind, may both mother and baby be cool and happy!" and murmuring her secret formula with ancient Pali words about "great fire" and "death."[37] With the shoulder cloth (sabaichiang) that she always wore to the temple draped diagonally over her left shoulder and under her right arm, Dūan knelt and faced the fire. Praying for happiness to the Mothers of the Fire, Fire-floor, and Wind, and finally to the Lord Buddha, the Holy Brotherhood of Priests, and the Sacred Law, she bowed, hands clasped, and touched the floor three times with her forehead. Then she rose and lay down on the plank with the holy fire on her right side.

846 [757] [853] As Dūan was resting quietly, Sāi made three "taping fruits" (lūk prakhop), balls of tamarind leaves, phlai, and salt wrapped in cloth. One was put well up between Dūan's legs to cure the birth wound (phlae). The other two were set aside for use on subsequent days. Sāi painted the baby's tongue with alcoholic medicine, and from her fingers dropped a little honey and boiled water into his mouth. Then she laid him on his tray on the floor close by Dūan, on the side away from the fire.

787 827 With satisfaction of a job well done, Sāi and Lek sat together for a quiet chew of betel. "Lek," said Sāi, "has it occurred to you on what a good day this boy has been born? It is a Saturday, so he will have power. Nothing, nobody, can hurt him! Once I delivered a boy on that best

---

[273] [262] 36. Alcohol was heating; rice, strengthening. Salt appears to be drying.

[263] [776] 37. The deities addressed were mae phra phlōeng and mae phra phai. Another Pali-Thai magic formula to control fire was: "Phra Mōk Khan Lā Nō will extinguish the fire from hell, na mō phut tha ya." Phra Mogdallana, one of the two most faithful disciples of Buddha, caused the fires of hell to go out (cf. Anuman Rajadhon 1961:137). The na mō...etc. was a traditional phrase to prevent spiritual dangers and is a repetition of the names of the Buddha in five incarnations, past and future (cf. Texter 1960:483-485).

date of all, Seo Hā Day, one Saturday in April, which was the fifth day of the waxing moon of the fifth month, in the year of the Big Snake. That boy is truly blessed. He will be the best and most respected doctor or teacher. He is in school now and people are always telling him he is bright. Chāi came on a Monday, so he'll be charming, but, alas, always roaming away from home! This new little son has his mother's features, which is as desirable as a daughter's having her father's features. Still, no one knows what characteristics come from a parent. One more thing, Dūan. Now you may take medicine as you please." Shortly after, Sāi took leave until the next day.

The new mother turned her face toward the fire and tried to sleep. It was night. Lek was close by, and Song slept in his mosquito net near Chāi's cradle. The fire was so hot it kept waking Dūan. Though the smoke made her eyes smart it kept the mosquitoes away. In spite of the discomfort, Dūan was eager to have the fire as hot as she could stand it, for this heat and that of the medicine would dry her uterus, rid her of the bad blood and waters of childbirth, restore her strength and stimulate her milk. She forced herself to drink as much hot boiled water as possible to keep out the dreaded wind element that might get into her body and cool her. When, however, the fire was overpowering, she dripped water from a handy jar with a cloth.

The next day, Sāi returned. With warm, boiled water she bathed Dūan--this time the upper part of her body also--and the baby. The boiled water was much more important for the mother, but being available, was used for the baby, too. Sāi washed the soiled clothing and the baby's little cloths. Turmeric was again painted on both Dūan's and the baby's abdomen, head, and neck to protect from wind. Sāi questioned and examined Dūan. Measuring a handspan down from Duan's groin, she pressed outward gently. "I want to see if these particular ligaments on the thigh are joined. They are often damaged and do not heal if the time by the fire is too short. Some mothers cannot walk at all. They have to call a masseur for regular treatment." To "make the ligaments well," she tapped Duan's body all over with the second of the tapping-fruit balls and had her sit on one while bathing. She massaged the muscles, stiff from lying quietly near the fire, by pressing in the ball with her hands and even feet. Medicinal herbs were warmed and laid on Dūan's breasts so that the "useless early milk [colostrum] which would give diarrhea" could be worked out and thrown away. "The real milk is not ready for the baby until the third day," Sāi said, "but if the baby is crying much, and if there is milk some mothers start nursing on the second day."

Almost from the moment of his birth, whenever the baby

853 cried, Lek had dribbled from her finger warm boiled water into his mouth. Now she mashed up for him a little kluai namwā banana, honey, and water. Song happened to pass as he was going to work and saying, "Let me give it to my son this first time," took the child in his arms, and pushed it gently in with his fingers. "This variety of banana does not cool, or give diarrhea because its tissue is harder. Uncooked is better than baked because it is easier for the baby to swallow," said Lek, "but baked food is incompatible if wind is in the body." Then she painted medicine on the baby's tongue with a feather.

Dūan turned to Lek. "Who would be the best person to start my child on good nursing habits?" Lek mentioned a relative who had much milk for her handsome child. This woman gladly came to give the baby his first suck.

Sāi came the third day for the same duties. It was the last day for her, unless something serious happened. Dūan's milk came in somewhat that day. She asked, "Is it true, as people say, that the 2 breasts give milk of different consistency, that one is water and the other rice?" Sāi answered, "That is an old saying. The important thing is to feed from both breasts at each [278] nursing. Here is medicine for the baby of honey, charred betel leaf, and water. Give it 3 times a day to cool his neck. His medicine is mostly to cool him slowly; yours is to keep you hot on the inside, while the fire warms • 846 you outside. Both are to keep out wind. Dūan, I would suggest 13 days by the fire, but you are the one to decide. It was 15 for your first child, but each time can be less. Be sure it is an odd number of days. My, women are certainly making it short these days! My first fire-rest was 27 days. And think of all the changes coming in! That trader-woman across the canal is using one of those small hot-ashes pots on her stomach. She is lying on a mat under her net, with her new baby. Her 2 other little children come in and out! No fire at [177] all! I have heard they use rubber hot water bottles and electric warming devices in Bangkok. Well, it probably is all right provided there is heat, but to have plenty of milk and strength to work in the fields, then you have to lie by a real fire. The longer you stay, the stronger you are. Bangkok ladies do not have to farm! They want the fire for the fine pale golden color it gives their skin (cf. footnote, p. 71)! Well, now I shall take my final leave." She reached up and took her khwan khāo bowl. Smiling, she left the house.

From then on, Lek and Mī were certainly busy, caring for both children, doing things for Dūan, boiling up quantities of water, and cooking. Song put the wood on

846 •

the fire for her during the first day or so, lest in her straining, Dūan's womb "move to a new place," but Duan did it herself thereafter. The smoke was harder on others than for her for she was on the floor. She could leave the plank to bathe and to relieve herself through a crack in the floor. As soon as Chāi got over being frightened of her turmeric-yellow stomach, he often came and lay beside her on the plank, though it was a squeeze! She took her medicine and often sipped hot water, feeling very modern with her brand-new thermos bottle. Constantly turning her back or front to the fire, she poked or dripped water on the flames to make coals. Once she tossed on a dry palm leaf, and as it flared up, put a cloth over her head to trap the smoke and heat. Though a rash developed on her body, she was complimented by Lek on the care she was taking of the heating and drying process. Unfortunately, a neighbor who wanted to help brought in some of the wood one day. Not remembering that to make noise with the wood caused diseased red eyes in the baby, she dropped the bundle with a crash! Alas, "sang" disease, of course, came at once. So the near-by mō who always cared for them had to be called, but he used no medicine. "For eyes red from 'sang'," he said, "never use any eye-medicine as drops, or they will be permanently damaged or blind. Such eyes have not enough resistance to win over the strength of the medicine. A drop of mother's milk, any mother's, in the eyes is the cure."

[514]

[753]

[757]

846
755

Uterus pain was said to last one day for the first child, 2 days for the second, and so forth, increasingly. As Dūan seemed to be in considerable pain, Lek resorted to an old cure: she secretly took the bamboo knife and the phlai from the baby's tray and put them under Duan's plank bed without telling her. Slowly the pain diminshed.

846
789

If anyone spoke of uterus pain to her during the fire period, Dūan would suffer still more. If a visitor spoke of the hotness of the fire, little boils would appear on her body. The fire, being thus made too hot, would have to be put out, and Duan "would be weak for a long time." This was because actions or even words occurring beside the holy fire set a new and permanent pattern. Neighbor's children were kept away lest they inadvertently exclaim about the heat.

846
574

A few relatives with gifts of banana, turmeric, and face powder dropped in, but visitors mostly stayed away. "It is an ugly sight," said Dūan, "lying here with only a cloth over me, half naked and yellow, and I fear there might be an unpleasant smell."

854

The winnowing tray, with the baby on a pillow now covered with a plastic cloth, rested on a low table, the legs of which stood in bowls of water to keep away ants. At first an old dome-shaped fish trap had been set over it to prevent draft and

854 mosquitos, but then Song bought in Mīnburī a bamboo frame with be-flowered netting. He also bought little mits to tie onto the baby's hands, so the fingers would not be sucked. Not every baby got these! Most of the time the baby lay naked, but was wrapped when nursed. One cool day they put over him a thick blanket. Lek, Dūan, or Song bathed him in boiled water 3 times a day and always after his excretions, which were wiped off with cloths. Then fresh cloth was put under him. On the seventh day since he was thriving, [856] he was bathed in ordinary rain water. Every day Lek vigorously squeezed his fingers and legs "to make them straight," which made him yell each time. To speed the drying of the [278] cord, a charred leaf of betel pepper was applied for a while to his navel on which Dūan spit saliva several times a day.

853 Dūan's milk supply was only fair. For milk stimulation they pressed her nipples and kept the fire hot. She was [262] also taking daily a special nursing curry of banana flower and vegetables (khaèng līang). One day she ate a cobra curry. A neighbor offered to help nurse the baby but Duan [854] refused. "It is a pitiful sight to see one's child at another's breast." Whenever the baby wailed he was given boiled water but was not necessarily at once picked up. If his crying continued, however, Dūan washed her breasts with warm water, pressed out and threw away a little milk, moistened the baby's lips with water, then lifted him on the pillow to her plank. She laid him beside her and leaned over him to nurse, though occasionally took him in her arms. He was nursed about 10 times a day, and also received honey, boiled water, and a bit of banana, too. [278] One day the baby cried a lot, so they painted him with turmeric and gave him baked cobra tail in alcohol to warm him up.

846 As to her own diet, Dūan followed the usual practice 262 of limiting herself rigidly to rice with salt, dried fish, and baked klūai namwā banana. Egg was too cooling: "like glutinous rice, it brought pus to the unhealed cord and the vaginal wound." Dūan also avoided "jam" bean which caused madness, fruit, and sweets. Whatever she ate affected her child by secreting into her milk. If she were sick, he would be so too. If he alone became ill, she must watch the foods both he and she ate. All these food instructions would stop only when nursing stopped a year or two later.

846 Duan decided to stay only 11 days by the fire, though Sāi had said 13 and she would have liked to stay longer. However, she wanted to get back to work because the transplanting season was approaching. Besides, the

wood was getting low. Friday (wan suk:day of happiness) was the best day of all to leave the fire, but for her, Friday happened to fall on the fourteenth day after delivery. It was better to come off on another day than to risk taking such an important step on an even-numbered day. Even numbers were always associated with the even corners of a coffin.

Usually the fire period went off safely, but not this time! One day, the heat "seemed to come up suddenly" and choke Dūan. She rose gasping and ran to the window for air. Horrified at the terrible danger of cool air, Lek hastened to get her back to the board. Then by accident Dūan dripped too much water on the fire and put it out! Later, Dūan was almost unconscious, felt unhappy (klum) and as if "the fire were burning inside her." Lek called both Sai and the mō. As the mō entered, Lek handed him the expected offering of incense, flowers, candle, and a baht and a half for his khwan khāo. He prayed to his teacher, then made holy water and a decoction both of which he gave Dūan to drink, saying, "The bad blood and the fish-water did not flow out well, a common trouble after childbirth. Since your body is not cold and the fire has not been out a half-day, you could start the fire up again. But as it is never good to put out the fire like this, I am taking you off it. Take a pot of salt, heat it well and wrap it in a cloth. Put that on your abdomen. Drink no cold water, or you will die."

Dūan was sad that she had to leave the fire early and on an even-numbered day, but one always wanted to obey a mō. All had gone so well when Chāi was born! That time she had taken the usual steps, choosing a Friday to come off the fire. Now she could not choose. Her formal leave of the fire was as before: The mō prepared earth holy water (nammon thoranisān), some of which she drank, and some he sprinkled on the fire. She then knelt down facing the fire and touched her forehead to the floor 3 times, asking the Mother of the Fire to bless her and her child, and to keep them well. She went outside to bathe, first with warm water to cleanse her body, then with holy water, and put on a clean skirt. Returning to the house she seated herself quietly, for she was not supposed to do anything for a time. Others in the family broke up the fireplace. The baby was taken off the winnowing tray. Warm water mixed with the holy water was dropped in his mouth. After being bathed in the holy water, he was laid in a little cradle made of a long cotton scarf, spread apart with sticks, and swung between 2 houseposts.

Now that the fire-period was over, they stopped all boiling of the water for the baby and Dūan. Rain water was substituted, but whenever the baby seemed sickly, boiled water was used. When their rain-water ran out, they got some at the temple. Both Dūan and the baby continued taking medicine for many weeks.

846 [789] Seven days after the end of the fire period, Dūan sent a message to the mǭ to look in his book as to what direction from the house she should bury the phlai, the bamboo knife, and the pot with the now dried placenta and cord. She already knew some of the procedure: burying should take place on a Monday or a Friday; south was right during the first three months of the lunar calendar, November, December, January; and the full moon of the twelfth month (October) was especially good, for the moon waned thereafter. Chāi had been born in October, so north was right for him, but for a girl it would have been east. Song or Lek or anyone could bury the pot, but most mothers did it themselves. If it were buried in the wrong direction, the baby would die, and if not under a tree, he would leave them and their home, and roam. The instructions came. With the things in her hand, she walked toward a big jackfruit tree. Beside it was a sakāe. Either was good, so she chose the sakāe which, being nearer the house, might strengthen by that much the roots that would keep her boy at home. After burying the pot and all, she returned directly to the house, remembering to pick, as she came, a fruit, a vegetable, a leaf, and then a piece of wood, all useful things. In the house she added them to the usual household stores. By doing so, and by using them up shortly, she ensured that her new son would be a good worker, who on returning home would always bring something to add to the requirements and wealth of the household. Once buried, the placenta, "like ashes," was ignored and the spot forgotten.

846 262 [461] [753] [757] 862 Within a month after childbirth, Dūan was back at farm work, even to the back-straining pounding of rice in the big mortar. For three months she avoided fruits, particularly guava and jackfruit. Then, since the baby was thin, she gave up vegetables, especially gourds, corn, and the green plants that grew in the canal. One day, because she carelessly ate some salted field crabs, the baby got thrush on its tongue. They cured him by smearing the milky juice of a peel of klūai nam banana on the cloth sheet covering his cushion, then wiping this on his tongue (cf. Anuman Rajadhon 1961:153). So the year passed, and then another. Not long after his third birthday, Dūan realized she was pregnant again, so took steps to wean him. She painted her nipples with "black medicine" (yā dam), a bitter and hot tasting ointment made from the boraphed rhizome (McF; 474). Then she sent the child over to her mother's older sister's house for four nights. To make quite sure, she followed an old ritual way, too. She boiled an egg hard and peeled it. Holding the egg behind her back, she turned her face away from her son, and handed it to him behind her so that she could not see his face. "Henceforth, you shall not nurse any more," she said. Without looking at him, she walked

153
853
856
82

A major clustering of first experiences, and so of habit formation, was in intra-uterine existence. Every experience of the mother was shared by the fetus. After birth, a baby daily formed habits of eating, sleeping, and crying, and later, as a child, habits of respect, obedience, truth-telling, etc. To create good habits efforts were bent to control and ameliorate any first experience: to make it as correct as possible; to seek out favorable astrological moments; to ask auspicious, skilled, or learned persons to be part of the initial action. An example was the establishment of nursing. When the baby was put to the breast the first time, the objective was not nourishment but to establish a good habit, viz. copious and strong sucking from an ample milk supply. Only after this first nursing did breast-milk as nourishment become important. If on this occasion he did not nurse well, he would have the habit of eating poorly all his life. Moreover, whatever the mother's experience with her first-born, it would not only be repeated every time he nursed, but set the nursing pattern for all subsequent children she bore. For her first-born, though, a mother would have had no previous experience of making milk. She had to be taught, or shown, how to make good milk, just as the baby had to be taught to suck, and later taught to eat rice. Consequently, the first-born baby was almost always first nursed by another person (not necessarily a kinswoman) with copious milk. Then 2 or 3 days later, because the example had been set, good milk came in and the mother started nursing. What was to be avoided at all costs was a first suck of colostrum, which appeared to be "unfit, early milk" from an insufficiently lactating breast. This would be a poor precedent. Until a mother decided her milk was right for nursing, a baby subsisted usually on honey and water, and maybe a little crushed banana. If a woman were not satisfied with her nursing capacities for her first-born child, when the second child was born she might ask another lactating woman to give the baby a first nursing so as to improve her own habit.[42] One woman flatly said her own milk was always unfit as proved by her babies' health, so she used a bottle of (canned) cow's milk from the start. She felt she had the habit

[787]

153
853

---

42. Bradley (79-80) felt that the dehydration attendant on lying by the hot fire significantly reduced the quantity and quality of the milk.

[114]
[846]

153 of making poor milk. Any woman whose milk flowed early and
853 well needed no example, for she was seen as having the habit as an in-born characteristic so deeply ingrained that it came through from a previous incarnation.[43] After nursing was established by the mother, babies were not often given over to another woman's breast because they were reputed to refuse it, "being not used to it."

In sum, the nursing patterns in Bang Chan varied with the previous lactating experience (if any) of the mother, and the ordinal position of her children.

Hauck shows the old way of establishing good eating
(262 habits in a baby. "If a mother ate small amounts of many
846 different kinds of foods while lying by the fire, the child would not get diarrhea when he ate these foods for the first time" (1959:14). Through the beneficial effects of the fire, any deleterious qualities of the foods were eliminated (as we shall see in "The Fire of Maturity") and the child had his first experience with these foods in the breast milk.

153 Bang Chan's life was full of secondary opportunities for starting new habits. Every rice crop, every boat purchased, every house built, and all the rites of the life cycle could, if handled properly, start a fresh and fortunate sequence on its way. We shall have more to say of this in discussing maturity.

789 Imitation
844

The familiar principle of imitation (Anuman Rajadhon: 134), the influence of like making for like, operated throughout daily life in Bang Chan. An action, event or presence emanated an analogous influence on its surroundings. A woman returned from a visit to the midwife with all possible speed in order to achieve a speedy delivery of her child a few weeks hence. Another pregnant woman visited the temple on the final day of the rainy-season Buddhist

---

[829] 43. Bradley's informants gave an example of a deeply ingrained habit: "European and American mothers can better dispense [with the fire-rest] because their own mothers from time immemorial have never been in the practice of the custom, and consequently their constitutions do not at all require it (p.79)."

846 789 372 [753] [755]

Even after the child was out, the pile of wood was still a drying womb to be treated carefully. It was also the wood for a consecrated fire. To drop a piece of this wood carelessly both injured and desecrated. If this happened a disease of the eyes "sang," came at once for which no male medical powers had any remedy. The only cure was in women's hands, that essence of maternity, "a drop of mother's milk--any mother's." The larger implications of this linking of fire and maternity are dealt with in the next section.

## The Fire of Maturity

846 372

In the events surrounding the birth of the child, the significant step for the woman personally was the post-partum rest period by the fire (yū fai). Far more was at stake than just drying the uterus. The fire rest was one of the series of rites of the life-cycle which marked the course of an individual from birth to death. The others were the cutting of the umbilical cord, first head shaving, top-knot tonsure, ordination (for men), marriage, and cremation. Through the consecrated fire a woman formally achieved full maturity: she became suk (cooked, ripe, mature). Maturity did not come just by bearing a child. The fire brought about the transformation.[46] [885]

562

How was mature womanhood viewed? What was the essential female role and office? Bang Chan saw a woman as one who "feeds and lengthens lives." As the custodian of growth she was, first, the guardian of the vital, essential khwan soul, and especially of the immature, flighty khwan of growing persons. [774]

Secondly, a woman was a donor of nourishment (liāng).[47] Her primary responsibility was to nurture children and other tender beings. She nourished the fetus with her blood. After [827]

---

46. "The fiery element digests what is eaten or drunk...and cooks the body and gives it its beauty of complexion. And the body thus cooked is kept free from decay" (Warren:157-158).

47. All the deities "concerned with the welfare of our bodies and our khwan" were maternal (Māē), e.g. Rice, Water, Earth, "Mother-Goddess" (Māē Sū), and several Mother-Princesses (Chao Māē). Fire, and maybe wind, were both female (māē) and male (phra) (Textor:485). To these deities, "higher" than ordinary spirits, Bang Chan "owed more." [776]

Only when the youngster was satiated did she gobble the remainder.[50] Parents often commented that girls in general were obedient and good, but boys were not. Everyone spoke, however, of exceptions. The capacity to play the female role grew with the child. It was not completed with the physiological maturity of first menstruation but only with ritual maturity.

The rituals to fit a woman for her office, described as "directly related to the welfare of the child," had 4 specific purposes. They perfected her as a compassionate being; restored and strengthened her body; improved her capacities as a nourisher; and strengthened her own khwan. The key to each of these aims was the holy fire.[51] Because actions taken by the fire were immediately and permanently effective, every effort was made to induce auspicious happenings. Words spoken by the fire had compelling effect so even ordinary speech became magical. Speaking of the fire's hotness so raised its heat that a mother was burned. For this reason, uninformed or careless visitors like children or foreigners were a danger.

According to Buddhist thinking, suffering developed compassion. Through the discomfort of pregnancy, followed by the anguish of childbirth and the heat of the fire, a woman became compassionate and so achieved the guide-line for moral behavior. Then a woman was sure to be touched with pity for the younger or less fortunate. One teacher despite the inconvenience went home twice a day from school to nurse her new baby because she "pitied" him too much to hire a wet-nurse. It was "pitiful" to see a child at another woman's breast for it implied that its mother was either unwilling or unable to nurse it. Thus, babies were rarely nursed by others than their own mothers.

The fire also strengthened a woman by ridding her of bad blood and foul fluids. Wind and Fire, the 2 spirit guardians of the elements necessary to the occasion, were invoked to assist in the drying of the uterus. In addition, strengthening

---

50. Boys too fed their younger siblings but their purpose was a power-play: "to assure obedience in the future" (cf. Hanks and Phillips:648).

51. This fire was kept entirely separate from the one for cooking and boiling of water. It was ritually lit and ritually extinguished at the end of the fire-rest.

In addition, strengthening foods like rice and fish, the staples for stout farmers, were stressed. Fruit, "which gave no strength," and vegetables (except for the nursing curry mentioned below) were avoided.

The holy fire also transformed a woman into a better nourisher. It gave her new, lasting beneficial nursing habits. As one man explained, "the very nature of water is changed by boiling over a fire. It becomes suk (ripe)." Similarly, a woman's body, her very nature, was permanently changed to suk by the fire's heating. The fire, in fact, made suk all the food she ate beside it. Since this food was turned into milk, her breast milk became suk and so more nourishing, and did not disturb elements.[52] "Food eaten while lying by the fire, when eaten later on (during lactation) by the mother, does not cause diarrhea in the baby." Jackfruit ordinarily caused wind-trouble during lactation, but one woman ate it during the fire-rest, and at once "got used to it, so she could eat it all the time." To make themselves better nourishers, some women spoke of the desirability of "eating a bit of every kind of food." The "nursing curry" (kaeng lIang) was a mixture of vegetables.

Finally, the consecrated fire strengthened a woman's own khwan. She could better withstand convulsion if attacked by a spirit.[53] She was able thereby to handle a khwan even without the special magic that existed for it.

---

52. To be nourishing even the daily rice had to be made suk by boiling (Anuman Rajadhon:77). It may be that no food was considered nourishing unless suk, either naturally (like ripe fruit) or by cooking.

53. "...when 'involuntarily' entered by ghosts...maidens in the 17-25 age bracket tend to convulse more violently than do women of more advanced years"(Textor:406). "Maidens" were presumably not married and so not suk.

562
156 (riak khwan). Theirs was an augmented personal potency[55] in nurture not unlike the mana so widespread in the Asian-Pacific area.[56] The best midwives were liang dī, though not all liang
[759] dī were midwives. This societal peak was not an unattainable ideal. In the community, certain women were pointed out as liang dī and some of them recognized in themselves the validity of this title.

562 The association of rice, motherhood, and khwan now stands
774 clear. Rice made suk by cooking over a fire, was the essential
776 food not only for the body but for the khwan. Growth and life
262 depended on the nourished khwan. Rice came from a maternal figure, the Rice Goddess, Mae Phosop (cf. J.R. Hanks, 1960). Human mothers, too, when made suk, gave suk nourishment: the milk of the breast was merely transformed rice. Whenever rice was eaten throughout human adulthood, the Rice Mother continued her nourishment, for in each grain was a bit of her khwan, nourishing to the human khwan. The rice-bowl and ladle, used in many a ceremony, stood for the maternal care given a human
[782] khwan, and by extension, personal care throughout life. Whenever the rice bowl with offerings (khwan khao: soul-[of]-rice) was presented by a parturient or by a sick person, loving care comparable to maternal care was being requested.

182 The idea of re-birth, of a fresh start within the pure
885 area encircled by the holy cord, with auspicious words and
• 846 consecrated fire, was deep in every life-cycle rite. The particular circumstance of the fire of parturition was a
562 forthright cooking to bring out and increase a woman's
372 essential femaleness, to transform her from a youthful, partial giver into a complete, mature donor of nourishment. Such was the satisfaction of women in this female role that many said they would like to be reborn as women. Few wanted

---

55. Anuman Rajadhon (p. 134) reports that in India a newborn girl needed no ritual paraphernalia to keep away spirits because "her sex...is a protection in itself, and spirits cannot come to bother her." This was close to Bang Chan's idea of female potency.

56. Cf. "Mana" (E.R.E. VIII:375) for a quick run-down on a definition of mana.

182
885
846
562
372

to be reborn as men. All women were eager to undergo the post-partum fire at least once. After that modifications might be entertained.[57] Whether the baby lived or died was not pertinent, for the benefits of the fire were for the mother.

Comparison of Male and Female Maturation Rites

885
793
785
562

The parallel ritual that fitted men to perform their masculine role was ordination into the Buddhist priesthood. The well-documented Buddhist ends should not be permitted to eclipse this other personal goal. Just as the fire prepared a woman for motherhood, so ordination changed an immature youth into a man ready for marriage and fatherhood. He too was transformed from raw (dip) to ripe (suk). Men gained compassion through denial and suffering. Since their natures were seen as hard (khaeng), strong, bent on gain, influence, and power, possibly destructive and concupiscent, the severest deprivations were invoked: the renouncement of the gratifications of sex and food. Of the 2, the deprivation of food involved the greatest break with previous habits, for since babyhood, food had been a symbol of maternal care. Hence, a man was cast on his own. His only refuge and support was the Buddha, the law, and the Brotherhood. This self-denial induced the suffering that, coupled with knowledge gained from study of the scriptures, led to compassion. The suffering in no way

[261]

57. The fire-rest though desirable was not obligatory. In 1865, Bradley said it could be "dispensed with in times of civil commotion, for fear of the enemy" and "no damages whatever were suffered whatever to mother or child" (p.79). Like other life cycle rites it was postponed if not convenient (saduak). Also in times of peace, "a few mothers here and there cannot lie by the fire," and a few say, "they will not" (ibid:p.79). Bang Chan would accept this viewpoint freely as reflecting an individual, constitutional set of elements, or as an autonomous decision of an individual. The woman would never feel herself as competent as a ritually mature person though.

## Chapter VII

## ATTITUDES TOWARD MODERN MEDICINE AND MIDWIFERY

753
753
178

Modern and traditional medicine appeared to Bang Chan to have much in common. Both subscribed to a belief in disruptive intrusions. In typhoid and cholera, the old scheme postulated intrusions of fire and earth. Boils involved a spirit attack or excess of fire For these same disorders, new medicine spoke instead of virus or bacterial infection. Such concepts as nutritional deficiencies, insect transmission, and pollution, however, were alien to the old views as disease agents.

757
178
[755]

Modern medicines paralleled the old decoctions. Antibiotics, ointments, or pain-pills were appreciated for their efficacy, but evoked no surprise, for every plant in the world was said to have some therapeutic value. Injections were similar to the sub-cutaneous magical protective needle.

75
178
[164]

"Old" medicine did not feel threatened because people were not convinced that the modern was better. The 2 systems were viewed as different, each having its own specialties. The difference was sometimes phrased as "Old medicine cares for old ailments, modern medicine for new ones." Spirit possession and khun attack, for instance, were old ailments; poliomyelitis, gonorrhea, and maybe diphtheria, new (J.R. Hanks, 1955:155-195). It was sometimes better not to claim competence outside these customary lines. One MD said he could cure gonorrhea, but the young men preferred a city doctor. Sometimes, though, one could not be sure what was a new disease.

75
829
178

Another phrasing of the proper place for modern medicine was that because of varying "habit," differing social stations required differing medical techniques. "Modern medicine is only good for delicate city people or other kinds of farmers, but does not give enough strength for rice-farmers." The orchardists below Bangkok who "had the habit of eating a lot of fruit," and the teachers and traders of Bang Chan (who went to the second class practitioners, and occasionally to modern doctors) were assumed to have different physical needs than farmers. The post-partum fire was clung to as strength-making: "woman are weak if no fire." The hot ashes chamber, introduced from Bangkok, was for the most part used by non-farm women.

377
758
802
178
184

## Chapter VIII

## CHANGES

844
178
[162]

In studying change in the customs surrounding childbirth in Bang Chan, we have D.B. Bradley's description of birth in Bankok in 1865 as a base-line on which to project our findings. Since most of the population of Bang Chan (Thai, with a few Laotians, Mon, Muslims, and Chinese) stems from Bangkok, we may reasonably assume that the parallels derive from a true historical connection. Bradley's description fitted Bang Chan as if written today:

826
827
•846
178

> "Siamese theory in regard to the part which external and internal fire plays in the functions of life and health is made to work powerfully...There is, at such times, a diminution of heat in the body, and consequent liability to stagnation of the blood, which, if not guarded against by fire, will leave the uterus flabby and enlarged, bad humors in circulation, a consequent weak state of the stomach, resulting in the secretion of too little milk, and that of a bad quality for the child, all of which will be likely to be followed by a host of other fearful maladies to both mother and child...[Thus a woman lies by the fire]... exposing all parts of her body, and more particularly her abdomen, to that drying process, so that the uterus shall be forced to shrink up quickly to its normal dimensions, and the sanguineous streams which had been diverted to support the child before birth, shall, by fire, be driven backward to their more usual limitations, all which is...a sine qua non to a sound constitution and good health in the future..." (Bangkok Calendar, 1865:76-84).

178
846
372
183
757

Bradley showed that some behavior one might call "change" today was a recognized alternative in 1865. For instance, in Bang Chan a few women "are made too unhappy (klua) by the fire so cannot use it. They should take extra amounts of pickled medicine" (yā dong). Bradley wrote, "a few delicate females...who cannot endure [this] usual treatment, are compelled, against all their ...fears of the consequences, and all the importunities of their

friends to say positively that they cannot and will not endure it. For such, some other course has to be taken by the use of ...medicines" (p. 81).[74]

The most noticeable modification in the customs of childbirth was the shortened fire-rest which had shifted from 29 or so days, to 9 to 15 or less; this was practiced by everyone.[75] Another conspicuous change adopted by a few dozen persons was the substitution for the open fire of a heat-making contrivance, in particular the hot-ashes or charcoal burning container (chamber or fire-box: *fai chut*) and the hot water bottle. (The hot brick and wrapped pot of hot salt were probably old alternatives.) New, of course, were the occasional utilization of the Minburi Health Center; the second class doctors; and, somewhat more generally, the novelties of the market, such as flowered mat-frames, mits, shirts, pillowcases, and pacifiers. There were a few other changes noted.

Who took up the innovations? First, they were women who had already successfully borne a child, undergone a full fire-rest, and were bearing their second or later children. Being already ritually mature (*suk*) and of proven competence in childbearing, they had no reason to fear a change and nothing to lose. Age and experience gave them the self-confidence, authority, and interest to ponder their experience and decide on ways to increase their effectiveness and their comfort. They had the right to do so because of the fundamental autonomy of the individual. Strong-minded old ladies might criticise the substitution of the hot-ashes container for the fire, feeling it was not hot enough to do the job, but they never questioned the woman's right to do so. The least likely to adopt

---

74. On the other hand, Bradley (pp. 82-83) was puzzled why his success in saving the life of so revered a personage as the Queen by taking her off the fire, a move so thoroughly approved by the King, did not cause universal abandonment of the fire-rest. He was not aware that many a *mo* did the same (with the possible exception of the sponging with tepid water), that as a *mo*-with-a-particular-specialty he could do anything he wanted but no one would copy it without personal formal authorisation, and that he was up against the deeply-rooted rite of female maturation concerning which even royalty had no authority (Bangkok Calender, 1871:187-189).

75. We have no data on whether this shortening process set in in the 1930's, or after World War II in the late 1940's. The month-long rest was universal in the 1920's.

178 a new way was a woman bearing her first child because she
184 was not yet ritually matured. This she wanted to be.
372 Moreover, her self-interest led her to try to profit as
846 much as possible from the experience of elders by first
885 following the old way. By incorporating the experience of successful child-bearers into her own and the baby's life and by asking them to initiate actions auspiciously, she augmented by that much her own competence, and laid the groundwork for her future progress. Self-responsibility engendered respect for elders. Thus there was no split between old and young over innovations. Experience gave grounds both for conservatism and for changing, but at different age levels.

178 Secondly, changes were adopted by the rich who,
184 spending their money rather conspicuously, sought to main-
556 tain and enhance their social position. Their wealth and position were in themselves unquestioned as signs of merit earned in another incarnation.

178 The changes being introduced to Bang Chan were of two
564 kinds: first the prestigeful, and second, those giving no increment of esteem, i.e. idiosyncratic changes of taste or convenience; or those reflecting individual circumstances. The prestigeful innovations were oriented towards the use of market novelties, modern medical care, urban standards of cleanliness and beauty, and other ways termed "progressive" associated with the city of Bangkok, cynosure of the eyes of the rich. These values were leading certain families away from their original occupation of farming, into the fields of teaching, trading, carpentering, cottage-industry, etc. Since these new occupations brought in steady cash and large land holders, too, had a good income, an association was found of
372 wealth, prestige, urban interests, and innovation. Com-
846 ment on the hot ashes container (fai chut) indicated that
178 it was a strong symbol of prestige and progress. To use it was "to get away from ignorance and the old way of doing things." It was "cleaner, not hot or ugly, and more convenient." One teacher took it up after reading an advertisement in the newspapers that described glowingly its more efficient healing effect. On the other hand, one woman abandoned the fai chut because "it was not hot enough to rid her of stiff muscles," so she went back to the use of the fire. "It is all right for rich Bangkok ladies who want to avoid a scar, but it does not give
177 enough strength for a farmer." She had no urban preten-
178 sions. Also in this prestigeful aggregate, observed here
278 and there, were the market novelties mentioned above:
854 bed, mat, and mosquito net instead of the plank-bed; kits of medicine from the Chinese pharmacist instead of the old

854
179
178
[278]

home brew; rub-on medicine (yā chup) instead of a fire or fire-container; canned cows' milk, and nursing bottles for the baby, and the bottles washed with salt; the transfer of a baby from the tray to the cloth cradle before the termination of the fire-rest because "he needed fresh air;" and the rejection of the turmeric rub against the wind element as "dirty and ugly."

178
743
758
554
[842]

To use modern medical care was becoming prestigeful. Most spectacular here was a case of a prosperous and educated man who had had 9 children, then "feared he could not feed them all," so underwent voluntarily a vasectomy. Patronage of the second class doctors who used modern medications but explained them in traditional terms was frequent among the well-to-do. The Mīnburī Health Center, a resource in case of over-long and difficult labor, was beginning to be seen as a fashionable place to go for medical care and parturition. The case of the 2 teachers who laid plans ahead to go to the Center (but their quick labor precluded attempting to get there) showed that prestige had a stronger lure than convenience at times. It was much more convenient to bear a child at home, yet one of these teachers even talked about wanting to be delivered in Bangkok at the Woman's Hospital, an extreme of prestige and practical inaccessibility.

178
812
846 •
[789]

The drive toward progressiveness led to conscious re-examining of those "old ways" that could be visually tested. One woman said, "There are fewer spirits (phī) nowadays." There was the mother who pondered the maxim about burning up all the wood collected by the husband to make a child finish tasks when he grew up. Finding it not true, she abandoned it at her next confinement. A man said that the old belief that papaya should not be planted near the house because "it dies easily and doesn't like water," and so would affect a child, was "unreasonable because the harm was not specific [e.g. a threat to skin or eyes]. If specific, I might believe it." An opening wedge of disbelief was noted where a woman gave no bit of rice to her baby to start a habit for later benefits because "she was told but didn't believe it," and another who said the "winnowing rite was not important."

178
844
846

In addition to prestigeful changes were those due to individual circumstance, taste or preference, and convenience unaffected by social aspirations. One woman rejected going to the Mīnburī Center for delivery and took up the hot-ashes container instead of a fire because she could better direct her older children, and "it was less hard on them." A poor woman took no medicine during pregnancy because she had no money to buy it. A comment that of recent years medicines were purchased because "women are too lazy to make them up" as in the old days, sounded more personal than socially significant. A change induced by lack of money was that "hot spices

178
844
846

are less eaten today because they are too expensive."

A slight trend towards depersonalization might be part of the aping of urban behavior, or idiosyncratic, or of more general significance.[76] The Minburi Health Center may have been used to avoid certain face-to-face situations. A woman whose labor was prolonged was taken there by her (male) midwife who had to get to a meeting. He preferred the impartiality of the Center to turning her over to another midwife. A woman took up the hot ashes container so "others would not have to wait on her." Another appeared to have obtained a midwife from outside the community rather than seek out someone inside and closer at hand. A very poor woman used no boiled water because of inadequate help in the household to prepare it. Whatever the circumstances of her social isolation, ordinarily kin or neighbors would have seen to it that this job was done. This episode too was watched by neighbors who commented that since her health remained good, boiling might be unnecessary. Finally, to advertise certain medicines, a firm handed out yan, the magically inscribed cloth, to suspend on the holy cord that surrounded the mother. This was a long way from the personally inscribed "yan" of old.

[743] [571] [812]

A final reason for the acceptance of change was the larger number of choices of behavior because of a broader horizon. Bang Chan had never been an isolated community, for pilgrimages and visiting through easy boat-travel had been for decades part of its life. Yet the growing number of literates, the establishment of bus and other transportation services to the city, the experience, for a few, of work in Bangkok or of military service in Korea, the continuous association with non-Thai, (Chinese, Muslims, a Cambodian, and now the Americans), and the now somewhat diversified economy of the community all led to the increased familiarity with other ways of doing things. Patterns of childbirth were already reflecting this awareness.

[177]

Unchanging in the scene at childbirth was the necessity of supernatural assistance, and heat to ripen and restore the mother.

---

76. I feel this evidence is slight, and set it down merely as a point for future observation.

844 178 122 412 this rust is believed to cause tetanus--and they are unsuitable for the ritual objective at the moment of cutting. It will be remembered that cutting the cord on a rhizome of phlai or soil with a bamboo sliver from the housepost guarantees that a child will not roam away from home. Could the bamboo sliver be dipped in "heating" alcohol, or passed over the flame of a holy fire? Could the old family kitchen-knife--long associated with the household--be substituted and dipped in the beneficial heat of boiling water? Such a knife once was substituted on the winnowing tray. Might the phlai or soil be covered with a boiled, clean, old cloth? If modern science succeeds in coming up with an acceptable substitute, one sees the possibility of a very small change making a big difference in the amount of tetanus poisoning observed (Hauck, 1956:41). One should then ask the midwives to watch as to whether the new method reduced the infection called "death because of a red or green face and clenched fists."

262 In diet "the concept that a good choice of food is important to the health of both mother and child" (Hauck, 1959:2) was very much shared by modern science and by traditional ideas but the basis of choice was entirely different.[77] Modern science has ascertained that certain foods are [261] beneficial because of certain nutrients, while old beliefs have set up certain foods as desirable because of properties of heating, cooling, compatibilities with the elements, etc. The nature of these properties should be collected and listed. If dietary deficiencies in Bang Chan are noted, the foods that combine the needed beneficial qualities in both systems should be stressed. A hot-tasting tonic (yā) with appropriate dietary supplements, to be taken daily during pregnancy, and another kind during the post-partum period, might be acceptable. The period of the fire-rest is the best 372 place to initiate dietary changes for whatever is done by • 846 the fire becomes a habit beneficial to mother and child. The use of boiled water should be encouraged as "making for [illegible]th." Again, disturbance of customs is minimized, and the presence or absence of "increased strength" and healthiness can be observed experientially.

---

77. Hauck felt the concept was lacking, but it appears only that the grounds of choice were different.

The Muslim khwan khao contained " 7 items"--a young (or ripe) coconut with its water; thread or "a skein of yarn"(used not to tie in the khwan but "for the teacher"); 7 pieces of areca nut; 7 betel pepper leaves; one "heavy" (15 gram) yellow wax candle; one "bag" of incense; rice; and 30 baht in money.[78] The khwan khāo was not offered with the idea of its reaching phrá In (Indra) ultimately, but rather the local princely spirits of the land, chao thī, chao thān, and Mae Thoranī (Mother Earth). It was waved 3 times by the midwife over the abdomen of the woman in labor with the prayer: "Spirits of the land, Mother Earth, may the delivery be easy!" The khwan khāo was then placed at the mother's head. The woodpile was knocked over so as to point to Mecca, which was west, a direction avoided by the Buddhists. "When nearly ready to deliver, a Muslim midwife turns the mother's face in the direction where the family's hens hatch their chicks. If they have no chicken, then in any direction."[79] If delivery were slow, a Buddhist mō was called to "shift the mother to new places" until the baby came out.

Muslim women lay post-partum by a fire for the usual physiological reasons. In making up the fireplace, instead of a cluster of incense, flowers, and a candle, this purely Hindu-Brahman-Buddhist trio, they sprinkled salt "to keep away evil spirits" on the dirt at the corners. Salt, oil, or alcohol was spewed over the fire and the woman's body, or only magic was recited, "to control the poison of the fire." "Of these, salt is best," said a Muslim midwife, but "whichever a midwife used first has to be continued for the rest of her life as her way of doing things, because the habit has been started that way." The Muslim magic for controlling the fire was "ōm ming ōm fūn ōm fai sawā hai." "So be it, stove, rocks (or mountains), fire, be cool, may a blessing rest to you," though "ōm" is the Pali-Buddhist "mystical word." The placenta was not put in a pot beside the fire, but was washed by the midwife several times until perfectly clean, then was mixed with salt and buried in the dirt directly under the fire. When the fire was finally destroyed, the placenta was dug up, washed again, and immediately buried (not in a pot), with the

78. There was some evidence that the thread and incense were included only when a Muslim midwife was delivering a Buddhist woman.

79. To the Muslims this was an act of imitative magic. The Buddhists saw the action of a setting hen as a quick source of information for the parturient's orientation. The hen always avoided the direction of the phī lūang (Textor:378).

262 might provide clues to ways in which the diet may be improved.
128 Most of these items were included in lists given by Sharp et al. (1953)[1]. To those lists should be added the following items from our food records:

Green leafy and yellow vegetables: Leaves of bergamot, chili, morinda, onion, potato, pumpkin, (2)sa-(5)noo, and of the following trees: (2)ma-(1)dan, (4)khlyb[2] and West Indian pea tree; (2)kha-(1)cauaun flowers.

Other vegetables: flowers of leek and pumpkin, and Chinese or black truffle (water chestnut).

Fruits: Thai nutmeg and tomato.

Fresh foods other than fish: buffalo, duck, cobra, turtle and field rat.

128 At the end of Chart 2, sources of water for drinking and food
312 preparation have been included, not only because water is
271 properly considered a nutrient, but also because the water used in preparation of food may affect the wholesomeness of foods eaten raw or with little cooking.

271 Untreated water was the customary beverage with meals.
• 346 Ordinarily no distinction was made in source of drinking water
353 for children and adults although boiled water was given to mothers and infants to drink during the post partum rest
358 period (Hauck, 1956). Occasionally a sick person would be given boiled water to drink; for example one man who said he was "a little sick" and "not working" was observed to drink
272 hot boiled water from a thermos bottle. In 1955, Ralis[3] found that tea was seldom or never drunk by nearly 3/4 of the respondents. Less than 7% drank it frequently. Thus in Bang Chan no custom had grown up which would afford the general population with a measure of protection against infection from

---

114 1. See Sharp et al., 1953, pp. 193-196 for a list of 32
136 fish known to be found in Bang Chan; pp. 293-294 for 34 fruits
244 grown in Bang Chan, and p. 295 for 11 fruits known to be used
245 but not grown there; pp. 296-298 for 41 vegetables grown in
262 Bang Chan, and pp. 299-300 for 24 other vegetables used.

824 2. (4)Khlyb was the term used in Bang Chan for an uni-
252 dentified tree of the family Leguminosae. Its sweet tasting leaves were washed in boiling water to get rid of a bad odor, then were eaten with (4)nam (4)phrig, a chili sauce.

114 3. Golden and Ralis, 1957, p. 57. The answers to:
126 "Do you drink tea frequently, occasionally, seldom or never?"
272 were: often, 22; occasionally, 68; seldom, 158; never, 85.

262 888 understood that her merit helped her not to be hungry. Once she asked an eminent layman about eating at night. He said, "If you are not hungry, do not eat. If you feel hungry, it is better to eat. If someone invites you to eat, it is sinful to refuse."

261 Even young adults had a strong revulsion against gluttony. One of the symptoms of a man who went mad and had to be committed to an institution was that "he ate too much." A woman was despised because "she ate in secret. She stole eggs from her husband, sold them in the market, and then spent the cash on food which she ate there, instead of bringing it home." Definitions of a glutton were, "A 'with-rice' eater," or simply as "one who eats alone." These comments highlight the counsels of eating in moderation and in company. On the other hand, a full stomach was valued for "home is where one eats one's fill."

262 562 262 [220] At maturity, when farm and other tasks were shared as equals, men and women ate almost the same food. The old proscription against animal food for women was somewhat relaxed, but not entirely. To sustain farmers during the seasons of hard work, however, extra quantities of rice and rice alone, were considered essential. "With-rice" was pleasant but not so necessary. Any shift away from a diet of rice as ordinarily cooked in Bang Chan- was construed as a shift either in occupation or in health. For example an eminent citizen who gave [955] up farming took to eating (3)khaaw (3)tom often. This soupy rice, a staple dish for infant feeding, had interesting socio-economic connotations. It was served as a light lunch to cooperative farm-workers to be followed at the day's end by a real meal. It was also "delicate" food, suitable for the sick, for city-people, for those who did not toil with their hands and backs. Consequently, when this man ate this "delicate food" more often, he was consciously or unconsciously serving notice on the community that he was not going to do farm work any more, for (3)khaaw (3)tom could not possibly have sustained a farmer's strength. Caustic villagers hinted that he was putting on airs.

262 843 846 Among conditions in which some change from the usual diet was found were pregnancy, post parturition and lactation. Relatively few foods were generally considered to be tabooed under any of these conditions, but many women preferred to limit intake to "safe" foods if there were any possibility that certain foods might cause harm.

[126] Information was obtained from 42 mothers about the food they ate during the post-partum rest period. Two said they ate as usual, but for the remainder, the diet was considerably

---

[192] 1. Literally "beautiful rice." For method of cooking, see p. 33.

262 curtailed. About half ate soupy rice rather than rice as
843 usually prepared. All ate fish, but over half ate salted
846 fish only, and about one-fourth ate fresh fish only. Rice and fish were apparently the only foods considered safe by all of these mothers. The only other food eaten by half or more of them was banana of the (4)nam-(4)waa variety, baked bananas being commonly specified. Vegetables, when they were eaten, were usually in (1)kaeaeng (1)liang, a broth made with dried fish, and reputed to be valuable for milk stimulation. In Bang Chan, the inflorescence of banana was commonly used in making this product, but other vegetables were favored by some. When asked what foods they considered good for a woman who had recently borne a child, no mother knew of any such food, but the list of foods mentioned as being bad for the mother during the post-partum rest period included more than a dozen items mentioned from 1 to 4 times each: egg, sweets, beef, vegetables, meat, pork, poultry, fresh fish, sour tasting foods, jackfruit, mangoes, fruits of all kinds, and glutinous rice.

262 Fear of illness from eating incompatible foods after
842 child birth was rather strongly expressed by many informants,
153 even by some who knew of Chinese customs which were different
829 from the ancient Thai customs. Some also knew that foods which were customarily forbidden to the woman who had her child at home in the village, were not forbidden at the government health and maternity center at Minburi.

124 The 45 mothers who were interviewed during lactation,
262 but after work had been resumed, ate more nearly the usual
846 diet than was the case during the post-partum rest period. As in pregnancy, the mothers apparently had no notion of special dietary needs during lactation, but foods considered undesirable during lactation were mentioned 27 times. The list included 12 kinds of food, and four attributes of food, i.e. sour and hot tastes, fermented foods and raw foods. No food was considered harmful by a majority of mothers, the one which occurred most frequently, jackfruit, being mentioned by 8 only of the 45 informants.

262 Reasons were seldom advanced for considering various
753 foods unsuitable for mothers or children. During pregnancy,
853 the hot-tasting foods, i.e. those made with chili, were said by one informant to injure the baby's complexion. When asked at what age a child could have adult food, mothers might say at one or two years, but often specified without giving a reason, that the child could have anything but the hot-tasting foods. A reason given for omitting jackfruit from the diet during lactation was that it would cause diarrhea in the baby. One informant said that if a mother nursing a young baby, 1 or 2 months old, ate fresh vegetables, the baby would have diarrhea. Some informants said the "fragrant banana"[1] caused

---

1. The type of banana most familiar to people in the United States.

[146] [221] higher calorie intake in these periods. In general, the level of calories, phosphorus and thiamine and to some extent the protein varied with the rice consumption. The greater consumption of fish when fish ponds were drained during Round IV, accounted for the relatively higher protein content of the diets of both groups at this time, even though calorie intake was not at its peak. During this period, animal foods provided 45 and 53% of the total protein intake of Groups A and B respectively, whereas for the year as a whole, 37 and 40% of the protein intake of these groups was of animal origin.

The relatively high vitamin A and C intakes of families in Group A, during Round I as compared to other periods, was associated with a higher consumption of green leafy vegetables, and the use of sweet potatoes in quantity by one family. During Round II, families in Group A had few green vegetables, and their average intake of vitamin A was very low. The use of papaya, obtained as a gift, by one family in Group B during Round II raised the average ascorbic acid intake for this group substantially. Better average intakes, by one or both groups, of vitamin A, thiamine, riboflavin and calcium during the first Round, were not such as to provide liberal body stores to be called upon when food supplies of these nutrients were low.

000

## SOME RECOMMENDATIONS FOR IMPROVEMENT OF DIET AND NUTRITURE AMONG RESIDENTS OF BANG CHAN

[164] Attempts to improve nutritional status in Bang Chan should be directed both toward increasing the supply and intake of certain nutrients and toward improvement of sanitary conditions so that intestinal infestation, diarrhea and other related illnesses will not lead to needless loss or increased requirement of nutrients.

Solution of the related problems of disposal of human excreta and provision of a year-round safe water supply are [164] in the province of the sanitary engineer. Intestinal para- [312] sitism was common, but little can be done through treatment of individuals so long as the water supply is contaminated. [271] Rain water was preferred for drinking, so provision of adequate and sanitary storage for rain water, coupled with sterilization of water from ponds and canals when rain water is not available, would do much to ensure safe drinking [846] water. The custom of giving mother and infant boiled water [853] only, during the post-partum rest period, provides a starting point for extending use of boiled water to other ages and conditions.

3:Hauck et al. D-5 (1952-1954) 1959 AO7 Central Thai AO7
Bang Chan

## SUMMARY


124 Information on health, care, and diet of mothers and small
125 children in Bang Chan, Thailand, was obtained primarily by interview, although some direct observations were made. In general, three areas of inquiry were included in this study: 1) clinical history, especially such information as might have a bearing on the nutrition and health of the child, 2) food intake at various periods, and 3) cultural customs and ideas of interest in relation to the Cornell Thailand Project.

In all, 66 mothers of young children were interviewed. Information on diet during pregnancy, postpartum, and lactation was obtained from women who were either in the stage under discussion or had only recently passed through it.

The description of child feeding practices is based on records obtained concerning 57 children from birth to two years of age, a majority of whom were visited from 5 to 7 times.

Information on growth in height and weight is based on observations made on 71 children, most of whom were weighed and measured 6 or 7 times. Observations were made for 30 of these children both before and after weaning.

843 During pregnancy most women in Bang Chan continued to eat as usual. A few expressed cravings for certain foods, and a minority thought some kinds of food should not be eaten during pregnancy.

846 During the postpartum rest period most women ate a very restricted diet. Rice and fish, with salt, were the foods considered by all informants to be appropriate for this period.

853 As a rule, diet during lactation, after the mother resumed her usual work, was the customary family diet. A minority of informants mentioned foods which should not be eaten by a nursing mother.

164
146 Evidence of the need to improve diets in this region was provided by the occasional occurrence of beriberi or the history of beriberi among mothers as well as by medical inspection and family dietary studies.

853 Breast feeding was the rule in Bang Chan. For a majority of infants observed, breast feeding was continued into the second year, and some were breast fed for more than two years. Few received animal milk after weaning.

A small, rather flavorless banana was given to young babies, sometimes before they were put to the breast. This type of banana and soupy rice were the only supplementary foods given before 6 months of age. Protein-rich foods, chiefly fish and egg, were generally introduced in small amounts during the second half of the first year. Few infants were given vegetables before one year of age, and even then none had them daily. At two years of age, some children had not yet been given green vegetables. Late introduction of vegetables into the child's diet may be due to the fact that vegetables were often prepared as hot curries which were considered unsuitable for young children. 853

A child was usually allowed foods commonly eaten by adults by the time he was weaned, although a few informants specified that the child could have anything but "hot tasting" foods, i.e. foods containing chili. A minority of informants mentioned other foods as not good for younger babies.

Except for dietary restrictions while the mother was lying by the fire, postpartum, no well established dietary taboos connected with the feeding of mothers or babies were encountered. The concept that a good choice of food is important to the health of both mother and child seemed to be entirely lacking. 846 • 853 262

Many of the young children in Bang Chan failed to gain, or even lost, weight in the intervals between observations. Almost all infants appeared to gain steadily up to 6 months of age, but stationary weight or weight loss for periods of from 1 to 7 months was observed in most children at some time. These periods were noted more frequently among children from 2 to 3 years old than among younger ones. Such experiences were not more common after weaning than at other times, but the cause or causes of growth failure could not be determined from the information available. 145

Some approaches to improvement in the diet of Thai mothers and children are suggested. Improvement in the diets of mothers and small children would probably parallel any improvement in the general family dietary, since food is prepared at one time for all members of the family. 252

124 Information on growth in height and weight is based on obser-
125 vations of 71 children, most of whom were weighed and measured 6 or 7 times. For 30 of these children, observations were made both before and after weaning.

## HEALTH AND GENERAL CARE OF MOTHERS

145 Information obtained on menstrual history of girls and women in Bang Chan has been reported previously (Hauck, 1956). The median and modal reported age at menarche was 15 years with a range from 13 to 19 years.

163 Most married women in Bang Chan had children, and of 438 pregnancies reported by 84 mothers, over 90 per cent resulted in live births (Hauck, 1956).

843 Clinical History and Complaints During Pregnancy.

164 Most of the women interviewed reported no history of disease which might affect, or be affected by, nutritional status.

Four women had a history of beriberi; 3, a history of malaria; and one had active tuberculosis of which she later died. In relation to the current pregnancy, 6 women had minor complaints such as nausea in early pregnancy, faintness, and leg cramps. The physician considered these as probably physiological. Of the 4 women with more serious complaints, one who said she had pain in the abdomen and legs and difficulty in walking had manifest beriberi when seen a few days after delivery.

844 Delivery and Care of Mothers After Childbirth.

846 125 Information was obtained from 49 mothers concerning delivery and care after childbirth. For 43 of these women, ages reported were as follows:

| Reported Age (years) | Number of Mothers |
|---|---|
| 20 or under | 7 |
| 21-25 | 11 |
| 26-30 | 12 |
| 31-35 | 6 |
| 36-40 | 6 |
| over 41 | 1 |

The mothers interviewed had borne from 1 to 12 children. For 8 of them, this was the first child; but 25, a majority,

had 2 to 4 children. In each case, the information obtained related to the most recent delivery.

Delivery. - In Bang Chan delivery usually took place at home. Four of the mothers we interviewed went to the home of a relative or relative-in-law. In two of these instances the relative was also the midwife; in the others the mother was apparently seeking a place where she could be more satisfactorily looked after than at home.

Three women went to the Health Center at Minburi, about 3 miles from the center of the Bang Chan community, to have their babies. Two of these mothers expected to be delivered at home but were taken to the Health Center when labor proved long. All 3 returned home either on the day of delivery or the next day and lay by the fire. Two others, both school teachers, told us in advance that they expected or hoped to go to the Health Center, but when labor began they were unable to do so because their babies came so quickly. Aside from the 3 who went to the Minburi Health Center, only one of those interviewed went outside the community to have her baby. Informants usually considered the delivery uncomplicated; although, as noted, some labors were long.

Traditional midwives, who were not professionally trained but had learned from other traditional midwives before them, attended most of the mothers. One woman who was alone delivered the baby herself, one said she had no midwife but did not specify other help, and 2 had the help of women who did not ordinarily practice midwifery. The 3 women who were delivered at the Health Center had professionally trained help. Obstetrics as practiced in Bang Chan has been described by Hanks (1959).

Care of Mother During Postpartum Rest Period. - Traditional behavior during the postpartum rest period has been described by Hanks (1959).

Lying by the fire. - The ancient custom of (2)juu (1)faj[1] (literally to be by the fire) after childbirth was still observed by most women in Bang Chan. The chief difference between the practice as we observed it and as it was described in the Bangkok Calendar[2] for 1865 was in the length of the period. In former times this was as much as a month after the birth of the first child, with shorter periods for successive

1. See Appendix, p. 51 for glossary of Thai terms.

2. The unsigned article entitled "Siamese Obstetrics" was presumably written by the Rev. Dan Beach Bradley, M.D., a Protestant missionary who compiled the Calendar.

846 births, until with the seventh child it might be dispensed with altogether without harm. In Bang Chan women who observed (2)juu (1)faj rested for an odd number of days, from 5 to 15 in this series. Seven or 9 days was most common. An odd number of days was considered good; an even number, bad. A wood fire was customary, although in 2 instances a charcoal brazier was used. One woman lay near a charcoal brazier and used a hot ashes chamber[1] also. With one exception (a non-Thai), even those who did not lie by the fire, but who used the hot ashes chamber, rested an odd number of days.

846 372 The traditional ideas on which the custom of lying by the fire was based were described in the Bangkok Calendar (Bradley, 1865):

> "The Siamese theory in regard to the part, which external and internal fire plays in the functions of life and health, is made to work powerfully in these circumstances. It teaches that there is, at such times, a diminution of heat in the body, and consequent liability to stagnation of the blood, which if not guarded against by fire, will leave the uterus flabby and enlarged, bad humors in the circulation, a consequent weak state of the stomach, resulting in the secretion of too little milk, and that of a bad quality for the child, all of which will be likely to be followed by a host of other fearful maladies to both mother and child."

The author, however, attributed deficiency in milk production to the practice of lying by the fire:

846 853

> "Now it is very remarkable that these last sequences, which are guarded against at so much expense of ease and comfort by the custom, are postively and directly brought about by following it. The mothers have but little milk for their babes during the month, and that of a poor quality. Consequently the attendant nurses have to feed them from the hour of their birth with honey, rice-water, and the pulp of soft bananas. This is their almost entire living for the first two or three days, and a large portion of it during the first month."

846 Of the 5 women we interviewed who did not lie by the fire, 3 used a hot ashes chamber regularly throughout the postpartum rest period, one used it occasionally, and one used both the hot ashes chamber and a hot water bottle. This latter woman

---

1. A small metal box in which sticks of fuel were burned. The box was wrapped in cloth and placed on the mother's abdomen.

had lived outside the village and returned to the home of her mother, a traditional midwife, for delivery. Eight other women who were delivered by the same midwife observed (2)juu (1)faj. Two of these 5 women who, by using a hot ashes chamber, ventured to take a step away from the tradional practice were non-Thai (Chinese and Mon). Another, a woman aged 40, was having her 12th child. When we interviewed this woman during pregnancy she said she expected to lie by the fire, but when we visited her after the baby was born she was using a hot ashes chamber. The wife of one of the school teachers, who had observed the traditional (2)juu (1)faj with her first 5 children, said she found "the new way" more convenient; but by using it she had incurred the displeasure of some of the older women, especially her grandmother.

Activity and bathing. - Activity appeared to be rather limited during the postpartum period, but the respondents said they could move about to get some things for themselves, to eliminate, etc. We saw women sit up on the plank which served as bed to nurse the baby, change the cloths under it, and help to weigh and measure it (i.e. to assist us). Because of the warmth of the fire, and to avoid the smoke, the women turned from side to side frequently.

Bathing was customary during the postpartum rest period. For the first three days this was one of the midwife's responsibilities in care of the mother (Hanks, 1959).

Medications. - The 46 women who told us about medications used after childbirth had a total of 63 medicines; i.e., many used more than one kind. With one exception these were taken internally, and all preparations taken internally were mixed with alcoholic liquor (28% alcohol). Of the medications used, only one was prescribed from the Health Center, 4 were home remedies, and the remainder commercial preparations.[1] Two popular brands, snake brand and (1)jaa (1)dauaung, accounted for 60 per cent of the total.

Milk stimulation. - As already noted, lying by the fire was thought to be favorable to milk secretion. One woman commented that, since she was not a good milk producer, she must lie by the fire more than 7 days. Six women spoke of the hot water which they drank during the postpartum rest period as good for milk production. A large majority of the women mentioned taking (1)kaeaeng (1)liang, a broth made with dried

1. According to the label, some of these were supposed to be useful for menstrual and other complaints, as well as for childbirth. Some were even recommended for treatment of various disorders in men as well as women.

853 fish and vegetables, when asked if they did anything to stimulate milk secretion. Other preparations, each mentioned once or twice, were cobra curry, fried (3)kuj (1)chaaj flower, pork soup with (3)kuj (1)chaaj leaves, dried peas and peppers cooked in palm sugar syrup. Some of the medications used were reputed to stimulate milk flow. Three women spoke of peacock brand medicine and one of a Chinese medicine in this connection. With respect to the Chinese medicine, another informant said she took it "to remove the serum which interferes with milk secretion." One midwife put herbs on her daughter's breast and expressed and discarded the "early milk" which was considered bad for the baby. No association appeared to be made between putting the baby to the breast and stimulation of milk flow.

846 312 Drinking water. - Information concerning sources of drinking water used by the mothers was obtained from 46 mothers of young babies. Of these, 20 used canal water, 23 rain water, and 3 used either one. In general, there was a relation between season and source of water used. Most of the mothers whose babies were born between March and October drank rain water, whereas from November to February a majority drank canal water. Some families had enough water jars to preserve rain water for much of the dry season, whereas others had few or no jars and, therefore, could save only small amounts of rain water on a day-to-day basis. In all instances, the water, whatever its source, was boiled for the mother during the postpartum rest period. Forty-six women said they drank the water hot; one said it was warm. One popular traditional midwife said, however, that if the mother had her baby in the hospital, use of boiled water for drinking and bathing was not necessary.

## CONDITION AND CARE OF BABIES AT BIRTH AND IN EARLY INFANCY

125 All information to be reported concerning condition and care of babies at birth and in early infancy relates to infants who were under one year of age when first visited. Thirty infants were seen when they were under 3 months of age.

### Condition at Birth.

164 165 The condition of the baby at birth was generally described as satisfactory. One infant who died on the third day, before we saw the mother, was said to have cyanosis, failed to cry at birth, and needed to be "helped" for about one-half hour afterward. Three infants had congenital defects: umbilical hernia, inguinal hernia on the right side, and hemangioma on the right groin.

In general, the diet during pregnancy seemed to be about the same as at other times. Rice cooked in the usual way (see glossary, Appendix p. 51) and fish of some kind formed the basis of the diet. A majority had green vegetables[1] either daily or frequently. Foods which seemed to be generally acceptable, although they were eaten less often, included vegetables other than green ones, pork, bananas, coconut, other fruit, fresh beef, and egg. 843 262

Eight women spoke of foods which they craved during pregnancy. Fruit in general, or specific fruits such as oranges, pomelo, guava, rambutan, and mangosteen, were most often mentioned. One woman said she craved Chinese noodles, and one, chilies.

When asked whether they disliked any foods during pregnancy, 5 women mentioned fish or the odor of fish, but in 2 instances the objection was limited to early pregnancy when the informants experienced some nausea. Three said they disliked vegetables, and one, hot tasting foods.

Four informants said that hot tasting foods (i.e. foods containing chili peppers) were bad for a pregnant woman; one considered dried and salted fish harmful "because of their fishy odor." One informant thought eggs were bad for a woman during pregnancy. Eggs were, however, the only food mentioned by anyone in Bang Chan as being good for pregnant women. The informant, a woman school teacher, said she ate them often anyway, hence did not alter her intake during pregnancy.

## Diet During the Postpartum Rest Period.

Of the 42 mothers from whom we obtained information about the food they ate during the postpartum rest period, only 2 said they ate as usual. One of these said she believed that if a mother ate small amounts of many different kinds of foods while lying by the fire, the child would not get diarrhea when he ate these foods for the first time. This woman worked outside the community and may not have acquired her belief about eating a variety of foods within the village. In any event, since her child died at five days of age, one would not expect this mother's eating behavior to have a liberalizing effect on the custom in 846 262

1. Most of the pregnant women were interviewed toward the end of the rainy season when swamp cabbage and (2)phag (2)ka-(2)cheed, the most popular leafy vegetables, were available. From our subsequent experience with the family dietary survey, one would expect that when canals were low, green vegetables would be eaten infrequently by pregnant women as well as by other members of the family.

Bang Chan. The only other woman in this series who did not restrict her diet postpartum was the wife of a school teacher. She said that women were supposed to eat rice with salt or salt fish at this time but that she ate all kinds of food.

As a rule, a woman's diet was considerably curtailed during the postpartum rest period. Rice and fish were apparently the only foods considered safe by all of the mothers interviewed. About half ate fish, but over half of these ate salted fish only, and about one-fourth ate fresh fish only. The only other food eaten by half or more of the mothers was banana of the (4)nam-(4)wa variety, baked bananas being commonly specified. Vegetables, when they were eaten, were usually in (1)kaeaeng (1)liang, a broth made with dried fish and reputed to be valuable for milk stimulation. In Bang Chan, the inflorescence of banana was commonly used in making this product, but other vegetables were favored by some.

When asked what foods they considered good for a woman who had recently borne a child no mother knew of any such food, but the list of foods mentioned as being bad for the mother during the postpartum rest period included more than a dozen items mentioned from 1 to 4 times each: egg, sweets, beef, vegetables, meat, pork, poultry, fresh fish, sour tasting foods, jackfruit, mangoes, fruits of all kinds, and glutinous rice.

[329] Fear of illness from eating incompatible foods after childbirth was rather strongly expressed by many informants, even by some who knew of Chinese customs which were different from the ancient Thai customs. Some also knew that foods which were customarily forbidden to the woman who had her child at home were not forbidden at the government Health and Maternity Center at Nimburi.

Diet During Lactation.

The term "diet during lactation" as used here refers to foods eaten when the mother had resumed her usual work following the postpartum rest period. The majority of nursing infants were under a year old when the records were obtained. All of the mothers ate rice everyday cooked in the usual way, and almost all had fresh, dried, or salted fish. About two-thirds had vegetables of some kind daily, but 8 women reported that vegetables of any kind were eaten only occasionally. Coconut, which as coconut milk is the basis for many curries, was used often. One nursing mother ate bananas daily, and about two-thirds of these women had bananas either occasionally or frequently. Only five women mentioned eating other fruits.

Three reported eating eggs daily,[1] and about two-thirds of the women had them either occasionally or frequently. Animal foods other than fish or eggs were eaten infrequently by most nursing women. 853 262

Our questions about ideas concerning foods during lactation did not uncover any firmly established traditional behavior. No food was considered harmful by a majority of informants. In response to the question as to foods which should not be eaten during lactation, however, 13 kinds of food and 4 attributes of food (sour, hot tasting, raw, fermented) were mentioned 27 times. Jackfruit, the item which occurred most frequently, was mentioned 8 times, corn, 3 times, swamp cabbage and pork, twice each; other items such as legumes, beef, poultry, egg, pineapple, and chico, once only. When asked if they disliked any foods at this time 4 women mentioned a dislike for vegetables. One mother said that cooked foods (in contrast to raw ones) were good for a lactating woman. Our question about foods craved during lactation brought little response.

To sum up, the mother's diet during pregnancy and lactation often approximated the usual diet in Bang Chan. A few women said they craved certain foods during pregnancy and some mentioned foods disliked at that time. A number of food items and attributes of food were considered by some informants to be undesirable during pregnancy and lactation, but no item was mentioned so frequently as to be considered tabooed. During the postpartum rest period, however, a greatly restricted diet was common. Mothers apparently had no idea of special dietary needs during pregnancy or lactation. 443 853 262 [144]

## FEEDING PRACTICES FROM BIRTH TO TWO YEARS OF AGE

This description of feeding practices is based on 256 interviews concerning 57 infants and small children. The majority of them were visited from 5 to 7 times each. Since, insofar as possible, we saw the babies at 3-month intervals, changes in feeding practices will be described by 3-month periods or multiples thereof. If each visit to a child is considered as unity, the 8 age groups from birth to two years included from 17 to 41 children each with 6 of the age groups including more than 30 individuals. Thus the data obtained may be assumed to provide a reasonable picture of baby feeding practices in Bang Chan, 1953-54, and of significant deviations therefrom. 125 953

---

1. This does not mean that the mother ate a whole egg at one meal. Frequently one or two eggs might be used to prepare food for the entire family.

251 One family stored cooked food in a basket which was hung from the ceiling. One homemaker frequently covered such foods with a basket, and in one instance a homemaker, who usually took no precautions to protect cooked foods, used a basin to cover food left on a table.

271 312 Source and Treatment of Water For Drinking and Culinary Purposes. - From the time the dietary survey was begun, on May 26, 1953, through January 18, 1954, all families used rain water for drinking.

Of the 14 survey days, spaced at about weekly intervals, between January 28, 1954 through May 8, 1954, canal water was used for drinking on 7 days, water from fish ponds on 4, and rain water on 3 days. No distinction was made in source of drinking water for children and adults.

312 744 [846] All families used canal water for washing vegetables, cooking, and washing dishes, on the survey days from May 26, 1953 through March 18, 1954. On the 6 survey days between March 24 and May 8, 1954, 4 families used water from the fish pond for these purposes. In no instance was the water treated in any way before being used, although alum is known to be used, at times, in the village, to settle or clear water, and boiled water is given mothers and infants to drink during the post partum rest period.

514 Disposal of Excreta. - Of 30 families from whom information was obtained, 20 had pits for toilet use, only one of which was equipped with a cover. One other family had a flush latrine. Of the 8 families who had no special place which was used for toilet purposes, 4 reported that family members urinated on the compound, 3 that they used the fields, and 1 that either compound or field might be used for urination. One reported that the compound was used for defecation as well as urination; the remaining 7 said they went to the field to defecate.

Six families with pit latrines covered feces in some way: 3 used earth, 2 ashes, and 1 either earth or ash. A majority of those who used either an uncovered pit or had no designated place, reported that no attempt was made to cover feces. From six families, no information was obtained on this point. Various materials were mentioned as being used in the manner in which western peoples use toilet paper. Cocoanut husks were mentioned most frequently (25 times), and other materials in this order: paper (newspaper 9 times, straw paper once), wood (4 times) and water (3 times).

From the information available, custom and convenience rather than sanitary considerations appear to determine practices that are followed. If improved practices are